

INFORMATION CAPSULE

Research Services

Vol. 0709 April 2008 Christie Blazer, Supervisor

A Review of Classroom Grading Practices

At A Glance

Research indicates that teachers' grading practices vary widely, even among teachers who teach at the same school and grade level. Since different standards and measures are used to assign grades, it is often difficult to determine what grades actually measure. This Information Capsule reviews the criteria commonly used in the assignment of grades and summarizes research that demonstrates schools have differential grading standards. Finally, solutions to the grading dilemma, such as clearly communicating the methods used to assign grades to all stakeholders and including supplementary information on report cards, are provided.

Many researchers agree that the most important purpose of grades is to provide feedback to students and parents, but grades also serve many other functions, including (Walker, 2006; The Harvard Crimson, 2002; Birk, 2000; Marzano, 2000; U.S. Department of Education, 1994; Rugaber, n.d.):

- measurement of content mastery;
- discrimination among the quality of students' work;
- progress charting;
- motivation and incentive for students;
- information upon which to base administrative decisions, such as promotion and retention, students' rank in class, and placement when transferring from one school to another;
- communication of information to potential employers or college admission boards;
- assistance to guidance counselors so they can provide direction for students, such as which courses to take or occupations to consider; and
- instructional planning assistance, so teachers can determine students' strengths and weaknesses to group them for instruction.

Differential Grading Standards

Research indicates that grading practices vary widely, even among teachers who teach at the same school and grade level (Pollio, n.d.). Camara, Kimmel, Scheuneman, and Sawtell (2003) reviewed the literature on grading practices and concluded that grades have different meanings in different settings. They stated that "variation in meaning is introduced by the teachers who determine the grades, by the content areas in which they are awarded, by the schools, districts, or institutions of enrollment, and by the time frame under consideration."

Research indicates that grading practices vary widely, even among teachers who teach at the same school and grade level.

There is little consensus among educators regarding what criteria should be used to assign grades. Studies have found that most school districts and teachers include variables other than academic performance in the assignment of grades, such as effort, progress, motivation, attendance, class participation, and, to a lesser extent, behavior and attitude (Walker, 2006; Bassiri & Schulz, 2003; Baron, 2000).

Camera, Kimmel, Scheuneman, and Sawtell (2003) reported on a series of studies that found approximately one-third of school districts included nonachievement factors in the determination of student grades. Therefore, an "A" might mean 100 percent of the material was mastered, or it might mean the student tried very hard or made a lot of progress. Since different schools and teachers have different standards and use different methods for assigning grades, it is difficult to determine what grades actually measure (McColm, n.d.). Covington (2004) reported that, as a system of communication, grades are meaningless unless all educators use the same method to calculate them.

Research has indicated that the individual teacher's judgment is the major determinant of grades Camara (1998). Blount's (1997) interviews with high school teachers found that 86 percent of teachers reported student effort was a factor in their grading and 82 percent said they used grades to motivate students. Stiggins, Frisbie, and Griswold (1989) also studied the grading practices of high school teachers. They found that 80 percent of teachers reported achievement was the primary consideration in grading; however, the majority of teachers interviewed said they also considered student effort when assigning grades, as measured by factors such as homework completion and extracredit assignments.

Grading requires that subjective judgments be made by teachers. It is assumed that teachers can make accurate judgments about what students have learned because they know their students, understand their work, and are aware of the progress they have made (Pollio, n.d.). However, research has indicated that student characteristics such as gender, ethnicity, appearance, and behavior appear to influence teachers' determinations of high school grades (Camara et al., 2003; Pollio, n.d.). Stiggins, Frisbee, and

Griswold (1989) found that half of the teachers they interviewed reported using different methods for

grading high-ability and lowability students. Teachers said they graded high-ability students only on achievement, while lowability students were graded on both achievement and effort. Studies have also suggested that grading standards may be

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stricter in courses that tend to enroll higher-ability students, such as advanced mathematics and science.

Another issue to be considered is the point of reference from which grades were assigned. Camara (1998) reported that, in 18,000 high schools surveyed, almost 85 percent of schools

said they allowed teachers to award grades based on any distribution they chose. Marzano (2000) identified three primary reference points commonly used to assign grades:

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- Reference to a Set of Learning Objectives. Grading is directly linked to a clearly defined set of instructional objectives. Because grades are based on specific levels of knowledge or skill, they represent the level of mastery attained by students at the end of the unit of instruction.
- Reference to a Predetermined Distribution. This approach to grading predetermines the percentages of various grades to be assigned. For example, a teacher might distribute grades so that 25 percent of students earn an "A," 50 percent earn a "B," 20 percent earn a "C," and 5 percent earn a "D." The grade a student receives is dependent on the performance of the other students in his or her class.
- Reference to Knowledge Gain. Students' grades are based on how much they progress beyond their original level of knowledge or skill. The rationale behind this approach is that students should not be compared to each other, but to the amount of progress they can reasonably be expected to make.

Most researchers have concluded that the preferred method for assigning grades is to link

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them to specific learning objectives. Furthermore, they agree that grades should measure results, not effort, since there is no way to accurately measure how hard students have tried to learn (Covington, 2004; Camara et al., 2003; Marzano, 2000; Rugaber, n.d.).

Several studies have demonstrated that schools have differential grading standards:

- The U.S. Department of Education's Office of Educational Research and Improvement (1994) examined the relationship between test scores and grades using data collected for the National Education Longitudinal Study of 1988. When the researchers compared the relationship between grades and test scores at high-poverty schools (over 75 percent of students received free or reduced price lunch) and the most affluent schools (no more than 10 percent of students received free or reduced price lunch), the following results were obtained:
 - The "A" students in high-poverty schools received lower test scores, on average, than "A" students in the most affluent
 - schools. In reading, students attending high-poverty schools who received an "A" in English received test scores similar to "C" and "D" students in the most affluent schools. In

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mathematics, test scores of "A" students in high-poverty schools were similar to the scores of "D" students in the most affluent schools.

- In both subjects, "B" students in the highest poverty schools received scores similar to the test scores of students who received a "D" or lower in the most affluent schools.
- The "C" students in the highest poverty schools received reading and mathematics test scores similar to failing students in the most affluent schools.

■ Woodruff and Ziomek (2004) conducted a five-year study to investigate differential grading standards in high schools. Students' 11th and 12th grade ACT scores were grouped by school and then divided into quintiles. Analyses compared the first quintile group (bottom 20 percent of schools) and the fifth quintile group (top 20 percent of schools). Large differences were noted between the two groups' ACT composite scores (mean scores ranged from 17.1 to 23.7); however, GPAs ranged only from 3.0 to 3.3. These findings demonstrated that, regardless of the ACT score received, all students earned a GPA equivalent to a "B." In

other words, schools with students receiving the highest ACT scores had students with "B" GPAs and schools with students receiving the lowest ACT

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scores also had students with "B" GPAs. The authors concluded that different high schools assigned the same grades for different levels of achievement.

- Metropolitan Nashville Public Schools found evidence of substantial differential grading standards (Long, 2003). Their study matched students' algebra grades with whether they passed the state's Gateway algebra exam. They found that almost every student who received an "A" in Algebra passed the Gateway test. At three schools, 100 percent of the students who received an "A" in Algebra passed the test at the "advanced" level. However, at three other schools, only 33-40 percent of those receiving an "A" in algebra were rated as "advanced" on the Gateway exam. In addition, researchers concluded that students who received a "B" in Algebra at one high school failed the Gateway test far more often than "B" students at another high school. These findings led the study's authors to conclude that schools used different standards to assign grades.
- A qualitative study conducted in the Long Beach Unified School District confirmed the finding that grades assigned by one school or classroom can mean something entirely different at another school or classroom. Teachers met to examine each other's grading practices and reported they were "shocked at

the variations among schools" (Berry, 1997). Grading differences were evident not only from school to school, but from classroom to classroom. Some teachers considered all tests, homework, and projects and included classroom participation when assigning grades, while others counted only major assignments. Differences in classroom tests used to measure content mastery were also reported. Teachers used different cut scores to assign grades, so that the same score represented an "A" at one school and a "B" at another school.

Solutions to the Grading Dilemma

Walker (2006) recommended that school districts develop criteria for grading that is accurate, fair, and consistent across all of their schools. The methods used to assign grades and the criteria included in making these determinations should be clearly communicated to all stakeholders.

Including supplementary information on report cards, such as related test scores and indicators of participation, effort, and progress, provides students and parents with a more accurate picture of students' performance in each course. The added information might also encourage schools and teachers to use academic performance as the primary criterion for assigning grades.

Birk (2000) suggested that grades be considered as one part of a comprehensive evaluation system that includes other measures of performance. She cited New York as an example, where some schools display scores from the state's Regents Examinations on report cards next to the grades students received in corresponding courses.

Seeley (1994) interviewed teachers from six urban middle schools representing six geographically dispersed areas. One site reported sending home monthly classroom checklists in addition to quarterly report cards. The checklists rated students on more detailed performance indicators, such as the ability to communicate thinking processes, engage in critical thinking, and organize work (Seeley, 1994).

For a discussion of grading practices in the Miami-Dade County Public Schools, see the upcoming companion piece to this paper, Research Brief: Classroom Grades and their Relationship to FCAT Scores, Volume 0705.

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